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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,208	10/13/2000	Nobuaki Hashimoto	107281	3514

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EXAMINER

ZARNEKE, DAVID A

ART UNIT	PAPER NUMBER
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2827

DATE MAILED: 09/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/673,208

Applicant(s)

HASHIMOTO, NOBUAKI

Examiner

David A. Zarneke

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-53 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

The product claims 1-27 contain 3 species, namely:

Species 1: Figure 1

Species 2: Figure 8

Species 3: Figure 10.

The method claims 28-53 contain 7 species, namely:

Species 1: Figures 1 and 4

Species 2: Figures 1 and 6

Species 3: Figure 1 and 7A

Species 4: Figures 8 and 4

Species 5: Figures 8 and 6

Species 6: Figures 8 and 7A

Species 7: Figures 8 and 7B

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply

Art Unit: 2827

must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Product claims:

- species 1: claims 1, 4, 7, 10, 13, 16, 19, 22, and 25
- species 2: claims 2, 5, 8, 11, 14, 17, 20, 23, and 26
- species 3: claims 3, 6, 9, 12, 15, 18, 21, 24, and 27

Method claims

- Species 1: claims 28, 35, 42
- species 2: claims 29, 36, 43, and 49
- species 3: claims 30, 37, 44, and 50
- species 4: claims 31, 38, and 45
- species 5: claims 32, 39, 46, and 51
- species 6: claims 33, 40, 47, and 52
- species 7: claims 34, 41, 48, and 53

The following claim(s) are generic: no claims are generic.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

Product claims lack the same special technical features in that they each apply the plating layers in different places on the interconnect pattern.

Species 1 puts the 2 platings on opposite sides of the interconnect pattern.

Art Unit: 2827

Species 2 puts 1 plating on a 1st interconnect pattern and a 2nd plating on a 2nd interconnect placed on the opposite side of the substrate from the 1st interconnect.

Species 3 puts the 1st plating on a 1st portion of the exposed side of the interconnect and a 2nd plating on a 2nd portion on the exposed side of the interconnect.

The method claims lack the same special technical feature in that they use each of the above product species and apply the plating layers using different methods.

Species 1 takes product species 1 and plates using one plating bath and 2 anodes.

Species 2 takes product species 1 and plates using 2 plating baths.

Species 3 takes product species 1 and plates using resists to cover and expose the region to be plated.

Species 4 takes product species 2 and plates using one plating bath and 2 anodes.

Species 5 takes product species 2 and plates using 2 plating baths.

Species 6 takes product species 2 and plates using resists to cover and expose the region to be plated.

Species 7 takes product species 3 and plates using resists to cover and expose the region to be plated.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication should be directed to examiner David A. Zarneke at (703)-305-3926. The examiner can be reached on M-F 10AM-6PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (703)-308-1233. The fax phone number is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist at (703)-305-3900.

David A. Zarneke
September 2, 2003

